

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/012073

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ H01S3/042

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ H01S3/00-3/30

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

| | | | |
|---------------------------|-----------|----------------------------|-----------|
| Jitsuyo Shinan Koho | 1922-1996 | Toroku Jitsuyo Shinan Koho | 1994-2004 |
| Kokai Jitsuyo Shinan Koho | 1971-2004 | Jitsuyo Shinan Toroku Koho | 1996-2004 |

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | JP 6-45667 A (Hoya Corp.), 18 February, 1994 (18.02.94), Full text; all drawings (Family: none) | 1-2 |
| Y | | 3-7 |
| X | JP 1-268080 A (Mitsubishi Electric Corp.), 25 October, 1989 (25.10.89), Full text; all drawings (Family: none) | 1-2 |
| Y | | 3-7 |
| Y | JP 11-340551 A (Mitsubishi Heavy Industries, Ltd.), 10 December, 1999 (10.12.99), Abstract; Par. No. [0088]; all drawings (Family: none) | 3 |

 Further documents are listed in the continuation of Box C. See patent family annex.

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| * Special categories of cited documents: | |
| "A" | document defining the general state of the art which is not considered to be of particular relevance |
| "E" | earlier application or patent but published on or after the international filing date |
| "L" | document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) |
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| "T" | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "X" | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "Y" | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "&" | document member of the same patent family |

Date of the actual completion of the international search
24 November, 2004 (24.11.04)Date of mailing of the international search report
14 December, 2004 (14.12.04)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| Y | JP 2001-15844 A (Yugen Kaisha Saifasha), 19 January, 2001 (19.01.01), Par. Nos. [0009] to [0014]; Fig. 13 (Family: none) | 4-6 |
| Y | JP 6-216438 A (Fuji Electric Co., Ltd.), 05 August, 1994 (05.08.94), Par. Nos. [0026] to [0027]; all drawings (Family: none) | 7 |